Abstract of the Disclosure

In an apparatus and method for dispersively processing an
IP packet forwarding for supporting a quality of service(QoS),
an IP forwarding information base gotten by processing and
extracting a routing protocol is dispersed to all input ports
of a router on the basis of the QoS in a private network
processor for performing a routing protocol process function,
so as to dispersively process the IP packet forwarding. The
method for dispersively processing the IP packet forwarding
for supporting the QoS includes the steps of: a) classifying
reception IP packets according to the QoS and storing them at
an input-side class queue; b) searching the forwarding
information base by using an exact matching table and an LPM
(Longest Prefix Matching) search table according to an IP
header value of the IP packet stored at the input-side class
queue, and gaining forwarding information; c) transferring the
IP packet according to the gained forwarding information; d)
classifying the transferred IP packets according to the QoS,
and storing them at an output-side class queue; and e)
outputting the IP packet stored at the output-side class queue
according to the QoS, whereby being used in the IP packet
forwarding dispersion processing apparatus for supporting the
quality of service, etc.